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# STUDENT PERCEPTIONS OF THE DISTANCE EDUCATION MODE COMPARED WITH FACE-TO-FACE TEACHING IN THE UNIVERSITY DISTANCE EDUCATION PROGRAMME

#### Abstract

This paper is based on a study of the perceptions of the distance education mode compared with face-to-face teaching on the part of students on the university distance education programme at the University of Antioch over the period from 2001 to 2007. It is not possible to ignore the close links between educational processes and social, economic, administrative, cultural and political conditions, not only at the beginning of the course, but throughout its existence. The goal of higher education is to promote the development of a professional approach on the part of its students, irrespective of whether they study at a distance or physically attend a campus of the university.

When comparing the two modes of delivery (distance and face-to-face) in higher education, while controlling for a number of other personal and demographic variables, it was possible to confirm that there were no significant differences that could be attributed to different modes of delivery. This is not an accident, and arises because of the pedagogic orientation of the primary and secondary schools, which direct their efforts to the delivery of information and the development of basic skills rather than the development of students who are skilled in observation, analysis, synthesis and have leadership qualities which would fit them to direct the process of social change.

# Introduction

The study "Student Perceptions of the Distance Education Mode Compared with Face-to-Face Teaching in the University Distance Education Programme" is an integral part of the evaluation of the internal and external effectiveness of the Distance Education Programme of the University of Antioch.

# Theoretical Scope

#### Object of the Study

The object of the study was to analyse perceptions of the distance education mode compared with face-to-face teaching in the University Distance Education Programme of the University of Antioch.

#### Research Questions

- What methods does the University of Antioch use to assess students?
- What was the overall perception of students of the distance education programme, compared with face-to-face education?
- Were perceptions dependent upon the age of the students?
- Were perceptions dependent on the educational experience of the students?

- Were perceptions dependent upon the number of credit courses taken?
- Why are there no significant differences between the ways in which students perceive distance education and their perceptions of face-to-face education?

# Theoretical Bases

The experience of the University of Antioch in the 1970s made it possible to conclude that the method of delivering education should be more flexible, in a way that would support and encourage team work, overcome individualism and promote divergent thinking. That experience arose from a context where a simple model of technology was implemented, which did not require great investment in sophisticated equipment that would need to be imported.

At the same time it was thought to be important to stimulate educational research, in order to develop an educational approach that was adapted to the conditions prevalent in Antioch.

The other position taken in the development of the project of the "De-Schooled University" (or possibly "Open University" (?)) was that it was essential to address two levels of understanding of educational technology: the intellectual level which involved the theoretical foundations for planning the curriculum, and the technical level which involved the development of models and logistical provision to underpin the development of the process.

At the intellectual level, there was also an effort to describe the aims that should inform the educational process, which would become a guide for the design of the form and content of distance education programmes and for the selection of the approaches suitable for its development (Arboleda [1]). The project adopted an attitude of permanent criticism and self-criticism with a view to evaluate and renew the models used in the design and presentation of teaching, the production of materials, the process of administration of teaching / learning based on a parallel process of research, and the development of a simple technological model which did not imply heavy investment in sophisticated equipment (Arboleda [1], Briones [2], Pisanty [3], Cabero [4], Cabero [5], Cabero [6], Cabero [7], Gisbert [8], Martínez [9], Román [10], Padula [11]). The inertia of the teachers who were involves in faceto-face education meant that there was a tendency to apply the same methods as they used in the classroom in distance education, which reflected a very mechanical approach to teaching (Román [10], Pádula [11]).

# Objective

To study the perceptions of the distance education mode compared with face-toface teaching on the part of students in the University Distance Education Programme.

# Methodology

The study of the perceptions of the distance education mode compared with face-to-face teaching in the University Distance Education Programme was an expost-facto study.

# Population

2166 students in the Distance Education Programme.

# Sample

Based on the results of a pilot study to test the research instrument to be distributed to the students, it was decided to use a sample of 300 distance education students, with a view to obtaining results with a tolerance of 0.06, a statistical significance exceeding 95% and a Quasi-variance in the population of 0.28. This sample was then allocated to the different regional centres in proportion with the number of students at each centre. The sample was also balanced in terms of gender and number of credits taken, so as to be representative of the whole population.

#### The Research Instrument

The research instrument was distributed to the subjects finally selected for the sample. The instrument was distributed at the regional centres on days that had been allocated for tutorials. 275 questionnaires were eventually returned.

In order to collect the information to meet the objective of the study, individual and group interviews were used, as well as focus groups and a questionnaire distributed to students on the distance education programme.

The questionnaire was constructed to collect information on three scales, each of which contained items that made it possible to distinguish between the three attitudes that the students could adopt with respect to the course on which they found themselves enrolled.

Each scale was validated by obtaining expert opinion, and by conducting a pilot study. These provided reasons for confidence in the scales. The Spearman-Brown coefficients were 0.65 for Scale 1, 0.80 for Scale 2 and 0.78 for Scale 3. Using a process of item by item intercorrelation, the instrument was refined in order to make sure that there was consistency between items.

# Variables

- Gender: Male, Female
- Age: 22 years or less, Between 23 and 30, Over 30 years
- Educational experience: Less than 3 years, Between 8 and 15 years, 16 years or more
- Number of credits taken: Less than 40 credits, Between 41 and 80 credits, More than 80 credits
- Place of work: Medellín and its surroundings (Santa Fé, Rionegro, Cisneros, Fredonia); Central Magdalena, Lower Cauca and Urabá (Apartado, Caucasia, San Carlos, Puerto Berrio, Frontino and Segovia); Intermediate Zone (Yarumal, Támesis, Sonsón and Andes)
- Zone: Urban, Rural

# Analysis

The attitude students in the University Distance Education Programme in relation to the distance education mode compared with face-to-face teaching was measured on a scale using ten (10) items, which made up part of the general questionnaire distributed to students, and using open–ended questions in the same questionnaire. The answers to the latter addressed various operational aspects of the programme, and were considered to be among the important elements that shape the attitudes of the students to the Distance Education Programme, given that these form

a pre-requisite for study and have had a major impact on the attitudes of students in distance education.

A measure of the general level of satisfaction on the part of the students was sought, as well as the data to achieve the objective of the study.

From a sample of 275 students whose views were collected, 211 answered Question 18 of the questionnaire ('If you have any further comments with reference to the perception that you have of the Distance Education Programme at the University of Antioch, please write them here.') which was designed to collect all other comments about the programme. In the various answers to this question, students concentrated their attention on indicating deficiencies in the way that the Distance Education Programme functioned, and the incidents that affected the effectiveness of the course, although they identified as many things that were external to the course as internal. The students mentioned their overall judgements about the validity of the programme and the extent to which it developed skills and habits that supported independent learning and the meeting of the development needs of the province. On occasions they indicated their evaluation of the general aim of the programme, as part of 'an unprecedented educational plan whose object is to end, little by little, the dominance of the university that requires attendance', or the uncritical and demotivating impact of distance education and the false hope that it offers of democratisation. The responses to this question tended to be extreme, both positive and negative.

At a general level, also, the pioneering work of the University of Antioch in developing wider access to university was recognised, as well as the relatively small budget that had been given for the project, the efforts made by the administrative personnel and teachers associated with the Distance Education Programme. At the same time, students made suggestions for the improvement of the programme, such as better support for the educational technology on the part of the University, better publicity to secure wider recognition in the community, reducing fees, wider coverage within the programme for professions other than teaching, and greater consideration being given to the needs and circumstances of students, above all in the development of media and study materials.

From the above it can be concluded that the greatest impact on the views of students in relation to the operational aspects of the programme was negative. The factors that were most influential in creating this view of the Distance Education Programme were the lack of information for the community, the instability in the administrative system and the financial support, and a lack of trust in the national system of distance education, primarily owing to the sense of improvisation that pervaded the whole system.

With reference to the direction and organisation of the programme, the students drew attention to the lack of appropriate information about assessment, tutorials, the use of the Internet, access to media and materials, university systems to support the well-being of the students, and the operation of the programme and the University in general. Similarly, they complained about, "Sudden changes in the timetable without warning, explanation or justification", discrimination against distance education students compared with face-to-face students, as a result of which they felt that they had been under-valued by the University.

The use of media and the educational materials received the greatest volume of comments made by the students, who mentioned the doubtful quality of the tutorial staff (in terms of their commitment, responsibility and training), the shortage of tutorials, a lack of coordination between preparatory material and the content of tutorials, poor timetabling of the tutorials, low quality of the materials, the high costs, difficulties in following the course and failure to respond to complaints.

In relation to the assessments, they complained that the assessments did not cover the same material as the tutorials, that assessments relied excessively or exclusively on essay type questions, "in which marks were lost for not agreeing with the teacher", questionnaires were too long and with too many questions that were highly subjective, no account was taken of the shortage of resources in the research studies, little attention was paid to checking notes, results from assessments were returned late, assessments relied too heavily on material that could be memorised, some of the examinations included errors, and that a number of the teachers on the programme had the attitude that they should "belittle and demoralise the student".

The comments and complaints of the students, were not restricted to finding fault, but were coupled with concrete suggestions of ways to overcome the difficulties as part of the support offered by the students for the improvement of the Distance Education Programme. This was symptomatic of the critical attitude of the student body, and the awareness of the effect that shortcomings in the programme could have on students, and, through them, on potential students of the Distance Education Programme.

The students recommended that, as a response to their suggestions, a strategy should be sought to reduce the costs for individuals, and improve the channels of communication between teacher and student, possibly through the use of a one-stop advice centre.

The students also indicated the need to consolidate the programme, coordinating the criteria used by the teachers preparing the materials and those involved in providing the tutorial support. There was also the need for better management of general information and the need for tutors to be more thoroughly trained in the methodology of distance education, for decentralisation of the administrative processes of enrolment and the creation of sub-branches of the library at different regional centres.

The students indicated that the modules (texts and guides) were incomplete and repetitive. They asked for greater clarity in the contents and in the variety of examples that were used to support comprehension of themes.

Other issues that were raised, though less frequently, referred to the lack of a critical analysis of the contents of the programme, a possible increase in the use of radio, and increasing the coverage of the curriculum accessible by radio, and on increased recognition of the value of distance education on the part of the community.

The statistical analysis of the evaluation focused on ten main areas, notwithstanding the broad range of comments mentioned above. However, those general comments provide the context for a fuller and theoretically more precise understanding of the analysis conducted in terms of the original design, which addressed socio-demographic variables.

Taking into account the responses of the students, it was found that distance education (DE) was given a measure of value which was lower than that of face-to-face education (F2F), on account of a broad range of responses that gave an unfavourable rating both to the course itself and the distance education mode in general. However, when we look at those results in conjunction with the views of those students in relation to some of the operational aspects of the programme, we find that the students, before they could evaluate the general issues of distance education had to deal with a whole range of very practical issues, which touched upon failings in the administration, direction and finance of the programme, shortcomings of the part of the tutors and materials, changes of dates and delays in the delivery of instructional material and assessment instructions, which added up to produce a perception of the programme as part of a rigid educational policy at the level of the national government.

A result of 3.12, on a scale from 1 to 5, indicates a degree of indecision, and should be interpreted as a judgement in negative terms on the programme. In effect, no pronounced improvement that could be associated with the mode of delivery was found. On the contrary, students agreed with the suggestion that, "The distance education mode promotes poor quality professionals", and raised doubts about the effectiveness of face-to-face education as a means of preparing professionals, and thought that it was more convenient to study through distance education and that distance education could cater better for the differences between individuals. At the same time they saw it as a disadvantage that they were not able to mix freely with other students.

Notwithstanding these attitudes, there were other students who favoured the mode of distance education and identified strongly with the expressed aims of the programme, recognising that they were studying in that way because it suited their personal tastes or circumstances, and those students found that the programme substantially met their expectations.

The equivalence of the qualification obtained, from the point of view of society in general, is not clear. The outcomes, and graduates, of the Distance Education Programme have not been universally accepted. That is to say, this will only become clear once it has been possible for employers to develop an understanding of the quality and value of the professional development of graduates.

In each of the items in the questionnaire, respondents were asked to provide a grade from 1 to 5, where 1 represented complete disagreement and 5 complete agreement with the attitude being measured.

The major weight that reduced scores relating to the value attached to distance education when comparing the two modes of study was apportioned to the items which examined discontent with the operational aspects of the programme (items 3, 7 and 9), from the impossibility of comparing the final outcomes of the two modes (item 6) and from the higher rating that was given directly to the question of the quality of higher education and the high quality of development of personal skills which have traditionally been achieved through face-to-face education (items 4, 5, 8 and 10).

By cross tabulating the relative perception of the two modes of higher education with a range of control variables, it is possible to arrive at the conclusion that there are no significant differences that are directly attributable to those other variables.

Neither age nor gender, educational experience not number of credits taken, not even the location of the programme in different socio-geographic regions nor the subject studied nor the place of work (urban or rural) accounted for any of the significant variation in perceptions of the two modes. In all cases this remained steady at about 3.0, a score that indicated little commitment to either mode of study.

The only variables which showed even the slightest tendency to reduce the favourability of the perception of the distance education mode were age, level of education and number of credits taken.

One can see a slight increase in commitment to the distance medium as the age of the respondents increases. This tendency is even more marked if one looks only at the responses related to the impact of the Distance Education Programme on its students in their roles as teachers, and about the status of the programme in the community.

The attitude towards distance education improved directly in accordance with the length of time that the respondents had been linked to the education system, and a similar result for the number of credits taken.

#### **Conclusions**

The students focused their attention on signalling the shortcomings in the functioning of the Programme of Distance Education. With reference to the direction and organisation of the programme, the students pointed out the lack of appropriate information relating to assessment, tutorials, supply of media and materials, services supporting the well-being of students and the functioning of the programme and the University in general. When comparing the distance mode with face-to-face education, the perception of the students was lower, indicating an unfavourable judgement of the programme and of the mode of distance education.

The students expressed their agreement with the statement that distance education promotes poor quality professionals.

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#### References

[1] ARBOLEDA, T. (1999). Informe final del proyecto de Universidad Desescolarizada. Volumen IV. Medellín. Edición Corporación Educativa San Palo.

- [2] BRIONES, G. (1999). Preparación y evaluación de proyectos Educativos. Bogotá. Convenio Andrés Bello.
- [3] PISANTY, A. (2000). Medios para la Educación a Distancia. Revista Digital Universitaria. UNAM. 1, 30-31.
- [4] CABERO, J. (2003). Principios pedagógicos, psicológicos y sociológicos del trabajo colaborativo: su proyección en la telenseñanaza, en Martínez, F. (comp.): Redes de comunicación en la enseñanza. Las nuevas perspectivas del trabajo corporativo. Barcelona. Paidos. 129-156.
- [5] CABERO, J. (2006). Comunidades virtuales para el aprendizaje. Su utilización en la enseñanza, en EDUTEC. Revista electrónica de tecnología educativa 20.
- [6] CABERO, J. (dir) (2006). Formación del profesorado universitario en estrategias metodológicas para la incorporación del aprendizaje en red en el espacio europeo de Educación Superior Píxel-Bit. Revista de Medios y Educación, 27, 11-29.
- [7] CABERO, J., LLORENTE, M. C. (dirs) (2006). La rosa de los vientos. Dominios tecnológicos de los TICS por los estudiantes, Sevilla. GID.
- [8] GISBERT, M. (2005). NET LAB: Teleobservatorio universitario de docencia virtual. Píxel-Bit. Revista de Medios y Educación, 25, 71-74.
- [9] MARTINEZ, F. (Comp) (2003). Redes de comunicación en la enseñanza. Las nuevas perspectivas del trabajo corporativo. Barcelona. Paidos.
- [10] ROMAN, P. (2006). Los entornos de trabajo colaborativo y su aplicación de la enseñanza, en Cabero, J. y Romero R. (dirs). Nuevas tecnologías en la práctica educativa. Granada. Arial Ediciones, 213-255.
- [11] PADULA, J. (2005). No hay tecnología que reemplace a la pedagogía. En FMM (Federico Martin Maglio) educación (en línea).

www.fmmeducacion.com.ar/recursos/perkins

www.fmmeducacion.com.ar/recrusos/perkinstecnologiapedagogia.htm [consulta: 20-10-2005].

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